



(Clean Copy version) PLANT PATENT

[File No. 10451.0041.NPUS01]

APPLICATION FOR UNITED STATES PLANT PATENT

for

CHRYSANTHEMUM PLANT NAMED 'STEREOPHONICS'

by

Mark R. Boeder, Koningsplein 41, 2518 J.H., Den Haag, The Netherlands

This application claims the benefit of U.S. Provisional Application No. 60/396,825, filed July 17, 2002.

LATIN NAME OF THE GENUS AND SPECIES

Botanical classification: *Chrysanthemum morifolium*.

5 VARIETY DENOMINATION

The new Chrysanthemum variety denomination is 'Stereophonics.'

BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cultivar of Chrysanthemum botanically known as *Chrysanthemum morifolium*, and referred to by 10 the cultivar name 'Stereophonics'. 'Stereophonics', identified as 21214-0 originated from a cross made in a controlled breeding program in Chichester, West Sussex, United Kingdom. The female parent of the new variety, identified as 'P301D2,' is an undistributed, unpatented seedling identified as a white single. The male parent of the new variety, identified as 'P381D6,' is an undistributed, unpatented seedling 15 identified as a white single with longer ray florets. The new variety 'Stereophonics' has been asexually reproduced by vegetative cuttings in Chichester, West Sussex, United Kingdom and the distinguishing characteristics are retained through successive generations of asexual reproduction.

BRIEF SUMMARY OF THE INVENTION

20 'Stereophonics' is a pot type of Chrysanthemum plant variety having large white spatulate single flowers.

Comparison with Female Parent

Plants of the new Chrysanthemum variety 'Stereophonics' are similar to the female parent 'P301D2' in plant habitat and growth rate. In side-by-side comparisons 25 in Chichester, West Sussex, United Kingdom, under commercial practice, plants of

the new Chrysanthemum variety 'Stereophonics' compared to plants of the female parent cultivar, in the following characteristics.

1. The new variety 'Stereophonics' produces large white spatulate single flowers whereas the parent produces large white broad flat single flowers.
- 5 2. Plants of the new variety 'Stereophonics' have larger and taller inflorescence than plants of the parent.

Comparison with Male Parent

Plants of the new Chrysanthemum variety 'Stereophonics' are similar to the male parent 'P381D6' in plant habitat and growth rate. In side-by-side comparisons in 10 Chichester, West Sussex, United Kingdom, under commercial practice, plants of the new Chrysanthemum variety 'Stereophonics' compared to plants of 'P381D6' in the following characteristics.

1. The new variety 'Stereophonics' produces large white spatulate single flowers whereas the parent produces large white broad flat single flowers.
- 15 2. Plants of the new variety 'Stereophonics' have larger and taller inflorescence than plants of the parent.

Comparison with Other Varieties

Plants of the new Chrysanthemum variety 'Stereophonics' are similar to 'Cool Time' (U.S. Plant Patent Application Publication No. 2002/0129416) in plant habitat 20 and growth rate. However, in side-by-side comparisons in Chichester, West Sussex, United Kingdom, under commercial practice, plants of the new Chrysanthemum variety 'Stereophonics' differed from plants of 'Cool Time' in the following characteristics.

1. The new variety 'Stereophonics' produces white spatulate single flowers 25 whereas 'Cool Time' produces white broad flat single flowers.
2. Plants of the new variety 'Stereophonics' have larger and taller inflorescence than plants of 'Cool Time'.

BRIEF DESCRIPTION OF ILLUSTRATIONS

Typical specimens of the plant and flowers for the new Chrysanthemum variety 'Stereophonics' are shown in the accompanying digital photograph. The colors shown are as true as possible within the usual limits of this kind of illustration. Figure 1 is a whole plant view of the new variety 'Stereophonics' grown in a pot. The 5 plant shown in the illustration and described here is 52 days after the commencement of Short Days.

DETAILED BOTANICAL DESCRIPTION

The following description of the new Chrysanthemum variety 'Stereophonics' is of plants grown in a greenhouse in Chichester, West Sussex, United Kingdom in the 10 month of February. The cultivar has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in the environment such as temperature, length of day and light intensity, without any variance in genotype. The commercial classification of the new variety is a pot Chrysanthemum.

15 Plants of the new variety have been grown successfully under temperature conditions averaging about 18°C at night and about 24°C to 25°C during the day under light conditions of about 5000 to 6000 foot candles. The plants respond well to the use of growth retardant, such as B9 treatment. To produce a commercial product the plants may be pinched once with the center bud removed. The typical container 20 size for commercial growth is 14 cm. It has been observed that the shelf life of the new variety is about 24 days with a response time of about 7 weeks. The new variety is suitable for growth in a temperature range of 17°C to 28°C

The following description is with respect to a plant produced as a pot Chrysanthemum. In the description of this new Chrysanthemum variety, color values 25 have been taken from the Royal Horticultural Society Colour Chart (R.H.S.C.C.).

Plant

Plant type: Pot

Habit: Upright and free branching

30 Height: 24 cm

Width: 36 cm

Branching characteristics: Upright and free branching

Length of Lateral Branches: 5-14 cm

Diameter of Lateral Branches: 0.5-0.8 cm

5 Texture of Lateral Branches: Slightly pubescent

Number of Breaks from Pinch: 3-5

Stem Color: 137C

Response Time: 50 days

Vigor: Medium / Tall

10 Shelf Life: 24 days

Disease/Pest (Susceptibility/Resistance observed): None observed to date

Growth retardant type and treatment: 3 applications of 2.5 gm/liter B9 @ 2, 21 and 28
days after sticking of unrooted cuttings.

The plants were grown for 3 weeks in Long Day conditions (20 hours of light) and

15 then transferred to Short Day conditions (13 hours of dark).

Propagation:

Type: Vegetative Propagation Via Stem Cuttings

Time to rooting: 12-14 days with soil temperatures of 18°C

Rooting habit: Fine and Fibrous

20 Other treatments or conditions: none

Foliage

Number of Leaves Per Lateral Branch: 8-11

Compound or single: Single

Arrangement of Leaves: Alternate

25 Shape of Leaf: Typically 5 Lobed Ovate

Size of Leaf: *Width* (cm): 2-5 *Length* (cm): 2-8

Leaf Apex: Acute

Base: Obtuse

Attachment: Petioled

Aspect: Slightly undulating

Margin: Palmately lobed

Surface characteristics: *Top*: Slightly pubescent

Bottom: Pubescent

5 Petiole: *Color*: 137C

Length: 2 cm

Diameter: 0.2-0.3 cm

Texture: Slightly pubescent

Venation: net prominent mid vein at underside

10 *Color*: *upper side*: Near 139C

under side: Near 139C

Color: Mature Leaf, *upper side*: Near 147A; *under side*: Near 147B

Young Leaf, *upper side*: Near 147A; *under side*: Near 138C

15

Flower

Flower appearance: Matte

Flower type: Single

Flower form: Cupped

20 Flower shape: Circular

Flower habit: Domed Capitulum

Number of blossoms per branch: 3-5

Inflorescence form: Cyme

Depth of fully expanded blossoms: 2 cm

25 Diameter of fully expanded blossoms: 9 cm

Sepals:

Number: 23-30

Outer Color: Near 137C

Length: 0.5-0.9 cm

Width: 0.2-0.5 cm

Texture/Appearance: Pubescent

Peduncle: Peduncle length is shortest at the terminal flower and progressively longer moving down the stem.

5 *Length:* 3-10 cm, average 4 cm

Diameter: 0.5-0.6 cm

Color: Near 137A

Surface: Pubescent

Habit: Slightly Curving

10 *Strength:* Moderately strong

Pedicel:

Length: terminal: 2-5 cm; lateral: 5-7 cm

Diameter: 0.2-0.3 cm

Color: Near 138A

15 *Surface:* Pubescent

Habit: Slightly Curving

Strength: Moderately strong

Ray Florets:

Form/Shape: Spatulate

20 *Texture/Appearance:* Matte

Number per flower: 35-45

Length: 3-4.5 cm; *Width:* 0.5-1 cm

Apex: Rounded

Base: Tubular

25 *Margin:* Entire

Disc florets:

Form/Shape: Cylindrical

Texture/Appearance: Shiny

Number per flower: 150-250

5 *Length:* 0.6 cm; *Width:* 0.1 cm

Diameter of disc: 2 cm

Fragrance: None

Flower Bud (at onset of color):

Length: 0.5 cm

10 *Diameter:* 1 cm

Form/shape: Globular

General flower color:

1. Ray florets, *upper side*:

Immature: Near 158A

15 *Mature:* Near 155D

Older/Fading: Near 155D

2. Ray florets, *under side*:

Immature: Near 158B

Mature: Near 155B

20 *Older/Fading:* Near 155D

3. Disc florets:

Immature: Near 137D

Mature: Near 144B

Older/Fading: Near 151C

25 4. Bud: 158B

Flower progression with age: Flower form does not change and there is very little color fading.

Lastingness of blooms: about 24 days

5 . Reproductive Organs

Gynoecium present on Ray and Disc Florets

Ray Florets per individual flower:

Pistil Number: about 30

Stigma color: Near 6A

10 *Stigma shape: Forked*

Style Color: Near 145A

Style Length: 0.6 cm

Disc Florets per individual flower:

15 *Pistil Number:* about 30

Stigma color: Near 6A

Stigma shape: Forked

Style Color: Near 145

Style Length: 0.5 cm